

In the Claims

Please cancel claims 50-54, 57-65, 67, 68, 70-74, 76-89, 91 and 93-96.

Please add new claims 97-116.

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-65 (cancelled).

66. (withdrawn): The method of claim 50, wherein said at least one primer comprises a primer selected from MY09 (SEQ. ID. NO. 10) and MY11 (SEQ. ID. NO. 11).

67. (cancelled).

68. (cancelled).

69. (withdrawn): The method of claim 67, wherein said at least one probe comprises SEQ. ID. NO. 7.

Claims 70-74 (cancelled).

75. (withdrawn): The method of claim 50 or 74, wherein said at least one primer comprises SEQ. ID. NO. 9.

Claims 76-89 (cancelled).

90. (withdrawn): The method of claim 74, wherein said at least one primer comprises a primer selected from MY09 (SEQ. ID. NO. 10) and MY11 (SEQ. ID. NO. 11).

Claim 91 (cancelled).

92. (withdrawn): The method of claim 74, wherein said at least one probe comprises
SEQ. ID. NO. 6.

Claims 93-96 (cancelled).

97. (New) A method for detecting whether at least one selected strain of human papilloma virus (HPV) is present in a sample, comprising:

providing a sample that may include nucleic acid from at least one selected strain of HPV and may include nucleic acid from at least one non-selected strain of HPV;

providing at least one primer substantially complementary to a region in both the nucleic acid from at least one selected strain of HPV and the nucleic acid from at least one non-selected strain of HPV;

providing at least one probe that is sufficiently complementary to a portion of the nucleic acid from at least one non-selected strain to block amplification of the nucleic acid from at least one non-selected strain, the at least one probe comprising PNA sequences selected from the group consisting of SEQ ID NOS: 9,10,12,13,17-19, and 21;

exposing the sample to said at least one primer and said at least one probe under conditions in which at least a part of said region of said at least one selected strain of HPV, if present, will be amplified to produce an amplification product; and

detecting whether the amplification product is produced.

98. (New) The method of claim 97, further comprising capturing said at least one selected strain onto a solid support.

99. (New) The method of claim 98, wherein said capturing comprises using an Alu oligonucleotide on said solid support to capture said at least one selected strain by hybridization.

100. (New) The method of claim 97, wherein at least one of said at least one probe is a molecular beacon.

101. (New) The method of claim 97, wherein at least one of said at least one selected strain comprises a pathogenic strain.

103. (New) The method of claim 101, wherein said sample is derived from a subject and said pathogenic strain indicates a risk of cancerous growth in said subject.

104. (New) The method of claim 97, wherein at least one of said at least one probe is a hybrid further comprising a nucleic acid other than PNA.

105. (New) The method of claim 97, wherein the conditions in which at least a part of said region of said at least one selected strain of HPV, if present, will be amplified comprise conducting a reaction selected from the group consisting of a polymerase chain reaction, a ligase chain reaction, a rolling circle replication, a branched chain amplification, a nucleic

acid based sequence amplification (NASBA), a Cleavase Fragment Length Polymorphism, ICAN, and RAM.

106. (New) The method of claim 97, wherein the conditions comprise conducting a polymerase chain reaction, and said at least one primer comprises a primer pair suitable for amplifying said at least a part of said region.

107. (New) The method of claim 106, wherein the conditions comprise conducting a ligase chain reaction.

108. (New) The method of claim 106, wherein the conditions comprise conducting a rolling circle replication.

109. (New) The method of claim 97, wherein said at least one non-selected strain comprises a plurality of low-risk HPV strains.

110. (New) The method of claim 97, wherein said at least one non-selected strain comprises at least one strain selected from the group consisting of HPV strains 6, 11, 42, 43, and 44.

111. (New) The method of claim 97, wherein said at least one selected strain comprises a plurality of high-risk HPV strains.

112. (New) The method of claim 97, wherein said at least one selected strain comprises at least one strain selected from the group consisting of HPV strains 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68 and 70.

113. (New) The method of claim 97, wherein said sample is a cervical scraping.

114. (New) The method of claim 97, wherein detecting whether said amplification product is produced comprises in-gel electrophoresis and staining with ethidium bromide.

115. (New) The method of claim 97, wherein a plurality of probes are provided, wherein each of said plurality is sufficiently complementary to a portion of the nucleic acid from a different non-selected strain.

116. (New) The method of claim 97, wherein at least one of said at least one probe is substantially complementary to a portion of nucleic acid that is adjacent to the region of nucleic acid to which at least one of said at least one primer is substantially complementary.